

Nanoscience Through Nanofabrication

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The nanofabrication lab at LBNL is a facility with unique capabilities. In this talk I will describe those capabilities, how we maintain our them at the leading edge through fundamental research, and discuss how they are used to make progress across a diverse array of nanoscience areas.

I will illustrate this through examples drawn from some of our recent work, which includes: advanced electronic devices - studies of the limits of CMOS, organic electronics and quantum computing, x-ray microscopy and EUV lithography, catalysts, and lithographically guided self-assembly.